PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

23 MAR 2005

To:

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PCT

NOTIFICATION OF TRANSMITTAL OF INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

	Date of mailing *(day/month/year)* 20.01.2005
Applicant's or agent's file reference 345190D20617	IMPORTANT NOTIFICATION

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/FR 03/02788	23.09.2003	23.09.2002

Applicant
RAMBACH, Alain

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.

2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.

3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the International preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The Applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purpose of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purpose of deciding whether, in that State, the claimed invention is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the IPEA/	Authorized officer:
European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Netherlands Tel. +31 70 340-2040 Tx: 31 651 epo nl Fax: +31 70 340-3016	de Haas, B Tel. +31 70 340-4738

PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or Agent's file reference	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/FR 03/02788	International filing date *(day/month/year)* 23.09.2003	Priority date *(day/month/year)* 23.09.2002
International Patent Classification (IPC) or national classification and IPC C12Q1/14		
Applicant RAMBACH, Alain		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 6 sheets including this title page.

   ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Instruction 607 of Administrative Instructions of the PCT).

   These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

   - I ☒ Basis of the report
   - II ☐ Priority
   - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
   - IV ☐ Lack of unity of invention
   - V ☒ Reasoned statement according to Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
   - VI ☐ Certain documents cited
   - VII ☐ Certain defects in the international application
   - VIII ☐ Certain observations on the international application

Date of submission of the demand	Date of completion of this report
08.04.2004	20.01.2005
Name and mailing address of the IPEA European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Netherlands Tel. +31 70 340-2040 Tx: 31 651 epo nl Fax: +31 70 340-3016	Authorized officer: Tuynman, A Telephone No. +31 70 340-3741

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/FR 03/02788

I. Basis of the report

1. This report has been drawn up on the basis of the following elements *(the replacement sheets received by the receiving office in response to an invitation according to Article 14 are considered in the present report as "originally filed" and are not annexed to the report as they contain no amendments (Rules 70.16 and 70.17).)*:

Description, pages:

1-9 as originally filed

Claims, No.:

1-14 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language which is:

☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).

☐ the language of publication of the international application (under Rule 48.3(b)).

☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

☐ the description, pages:

☐ the claims, Nos.:

☐ the drawings, sheets:

5. ☐ This report has been written disregarding (some of) the amendments, which were considered as going beyond the description of the invention, as filed, as is indicated below (Rule 70.2(c)):

(All replacement sheets comprising amendments of this nature should be indicated in point 1 and attached to this report).

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty	Yes:	Claims	1-14
	No:	Claims	
Inventive Step	Yes:	Claims	
	No:	Claims	1-14
Industrial Applicability	Yes:	Claims	1-14
	No:	Claims	

2. Citations and explanations

see separate sheet

With regard to point V

Reasoned statement regarding novelty, inventive step and industrial applicability: citations and explanations supporting such statement

Reference is made to the following documents:

D1: AYERS L W ET AL: ANTIMICROBIAL AGENTS AND CHEMOTHERAPY, vol. 22, no. 5, 1982, pages 859-877.

D2: JONES R N ET AL: ANTIMICROBIAL AGENTS AND CHEMOTHERAPY, vol. 20, no. 6, 1981, pages 760-768.

D3: KLUYTMANS JAN ET AL: JOURNAL OF CLINICAL MICROBIOLOGY, UNITED STATES JUL 2002, vol. 40, no. 7, July 2002 (2002-07), pages 2480-2482.

D4: DATABASE WPI Section Ch, Week 199511 Derwent Publications Ltd., London, GB; Class B04, AN 1995-077141 & JP 07 000181 A (KYOKUTO SEIYAKU KOGYO KK) January 6, 1995 (1995-01-06).

1 Novelty (Article 33(2) PCT)

1.1 Documents D1 and D2 describe a medium for a hydrolysis test, comprising a chromogenic agent that releases a chromophore after hydrolysis with a lactamase purified from microorganisms such as Staphylococcus aureus (D1, page 863, left column, 4th paragraph; D2, page 761, right column, 2nd paragraph).
The subject matter of claim 1 differs from this known medium in that there are nutrients for the growth of meticillin-resistant microorganisms.

1.2 Document D3 (abstract, page 2481, left column, 2nd-4th paragraph), which is considered to represent the most relevant state of the art, discloses a medium for detecting meticillin-resistant microorganisms (MRSA, meticillin-resistant Staphylococcus aureus), comprising nutrients for the growth of said microorganisms, an antibiotic (oxacillin) and a chromogenic agent that releases a chromophore after hydrolysis with an enzyme that is active in said microorganisms. The subject matter of claim 1 differs in that the antibiotic is an antibiotic chosen from the group of second or third generation cephalosporins. Document D3 also discloses a method using this medium, and therefore differs from claims 13 and 14 for the same reasons mentioned above.

1.3 The subject matter of claims 1, 13 and 14 is therefore novel (Article 33(2) PCT).

2 Inventive step (Article 33(3) PCT)

2.1 The present application does not satisfy the conditions stated in Article 33(1) PCT, since the subject matter of claims 1-14 does not involve an inventive step as defined by Article 33(3) PCT.

The subject matter of claims 1, 13 and 14 differs from D3 in that the antibiotic is an antibiotic chosen from the group of second or third generation cephalosporins. The technical effect of this difference is that the medium and the method of the present application are more discriminating with respect to MRSA.

The problem that the present invention proposes to solve can therefore be considered as being the provision of a medium and of a method that are more discriminating for the detection of MRSA.

The solution to this problem that is proposed in claims 1, 13 and 14 of the present application – in particular including an antibiotic chosen from the group of second or third generation cephalosporins – is considered not to involve an inventive step (Article 33(3) PCT), for the following reasons:
Media and methods for a more discriminating detection with respect to MRSA, that include an antibiotic of the group of third generation cephalosporins (ceftizoxime), are already known from D4, which indicates that, with such media, only MRSAs will experience growth. Those skilled in the art are therefore sufficiently prompted by D4 to solve the problem indicated above by including an antibiotic chosen from the group of second or third generation cephalosporins in the chromogenic medium of D3.

2.2 The dependent claims 2-13 contain no characteristic which, in combination with those of any one of the claims to which they refer, defines a subject matter that satisfies the requirements of the PCT with regard to novelty and/or inventive step, for the following reasons:
The characteristics of claims 2-13 are either known from D3 or D4, or are part of the general knowledge of those skilled in the art.

3 Industrial application (Article 33(4) PCT)

3.1 Claims 1-14 are considered to be capable of industrial application and satisfy the criteria of Article 33(4) PCT.

4 Clarity, basis (Article 6 PCT) and description (Article 5 PCT)

4.1 It appears that the present application gives a basis (Article 6 PCT) only for the detection of meticillin-resistant microorganisms of the Staphylococcus genus. Those skilled in the art would be incapable of extending the teaching of the description in order to make it correspond to the entire field for which the protection is claimed, by making use of the usual methods of experimentation or analysis. It is fairly improbable that each meticillin-resistant microorganism not belonging to the Staphylococcus genus would necessarily be sensitive to the second or third generation cephalosporins. This sensitivity to the second or third generation cephalosporins appears to be a specific characteristic of MRSAs. In addition, for meticillin-resistant microorganisms not belonging to the Staphylococcus genus, there are not always chromogenic agents that release a chromophore after hydrolysis with an enzyme that is active in said microorganisms. For these same reasons, the description is not in accordance with the claims and, consequently, does not satisfy the criteria of Article 5 PCT either, since it does not allow those skilled in the art to execute the invention for all the microorganisms that fall within the scope of these claims.